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U.S. DEPARTMENT OF LABOR Occupational Safety and Health Administration

Form Approved OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

Snipbuilding,	and S	hipbreaki	ng (29 CFR 1915, 1916, 1917)				
		SECT	TION I	-			
MANUFACTURER'S NAME KNAUF FIBER GLASS GmbH (317) 398_443							
ADDRESS (Number, Street, City, State, and ZIP Co	odei		(0.17) 030 7107				
Fibrous Glass Insulation Pipe & CHEMICAL FAMILY	and	<u> Street</u> Tank In	Shelbyville, IN 46176				
CHEMICAL FAMILY				,			
			Fibrous Glass				
SECTION	11 -	HAZAF	RDOUS INGREDIENTS				
PAINTS, PRESERVATIVES, & SOLVENTS	*	TLV (Units)	ALLOYS AND METALLIC COATINGS	*	TLV		
PIGMENTS		(Othris)	BASE METAL	+~	(Units)		
CATALYST		1	ALLOYS		 		
VEHICLE			METALLIC COATINGS	 	 		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX	+-			
ADDITIVES			OTHERS				
OTHERS				+-			
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES							
Material CAS Number							
Fibrous glass 65997-17-3							
Phenolic Resin (cured) 25104-55-6					5 mg/m³ respirab		
25104-55-6				3.5	dust		
			·	_!	ł		
	TIOI	V III - P	HYSICAL DATA	•			
BOILING POINT (°F.)		NA	SPECIFIC GRAVITY (H2O=1)	N	NA		
VAPOR PRESSURE (mm Hg.)	1	NA ·	PERCENT, VOLATILE BY VOLUME (%)		NA NA		
VAPOR DENSITY (AIR=1)		NA.	EVAPORATION RATE (=1)				
SOLUBILITY IN WATER				N	<u>u</u>		
appearance and odor fibrous glas			ith foil/skrim/paper	<u> </u>			
SECTION IV -	FIR	E AND F	XPLOSION HAZARD DATA				
FLASH POINT (Method used) Fibrous alacs is	s nor	of Larmab la	e. Binder resin will pyrolize in a major		1:11		
EVINCING MEGIA	- 101		prince resilimiti pyrotize in a major	conf	lagratio		

	
	SECTION IV - FIRE AND EXPLOSION HAZARD DATA
FLASH POINT (Method used	^{d)} Fibrous glass is nonflammable. Binder resin will pyrolize in a major conflagrat
EXTINGUISHING MEDIA	Ω₂, water, dry chemical
special fire fighting in breathing appara	procedures Resin will pyrolize causing dense, acrid smoke. Use self-contained
UNUSUAL FIRE AND EXPL	LOSION HAZAROS None
: 	

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

5 mg/m³ respirable dust

EFFECTS OF OVEREXPOSURE Direct eye contact will cause mechanical irritation. Skin contact may cause transitory mechanical demmatitus. Skin absoprtion does not occur. Current studies indicate that glass fibers and dust do not represent a hazard to health. This product is not considered a carcinogen.

EMERGENCY AND FIRST AID PROCEDURES Eye contact--flush eye with flowing water for at least 15 minutes Skin contact--frequent rinsing of skin surface with water to remove accumulated fibers will minimize irritation. If irritation persists consult a physician. Treat as a mechanical irritant. No long term chronic health effects have been identified. Pre-existing upper respiratory and lung diseases may be aggravated by dust.

<u> </u>			SECTIO	NVI - R	EACTIVITY DATA			
STABILITY	, UNS	TABLE	CONDITIONS TO AVOID					
·	STA		X					
INCOMPATABILIT	Y (Mater	tais to avoid!		 _				
· Hydrofluc	ric ac	id will die	solva als					
HAZARDOUS DEC	OMPOSI	TION PRODU	CTS Viiiv	vais carbo	a diamada and an			
traces of hydro produce chlorin	gen cya ie or H	unide derive Cl and halo	ed from p genated A	hrolysis of ntimony.	n dioxide, carbon monoxide, carbon particulate, and resin. Decomposition of facing material will			
HAZARDOUS POLYMERIZATION		MAY OCCUP						
	<u> </u>	WILL NOT C	CCUR	X				

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	
Vacuum clean dust. Use a dust suppressant if sweeping is necessary.	
	٠.
WASTE DISPOSAL METHOD	
Fibrous glass is generally classified as a nonhazardous waste and disposal may be in land	
fill for noncritical materials. Local regulations should be consulted.	

SECTION VIII - SPECIAL F	PROTECTION INFORMATION
where sensitivity to air borne particles may cause venturation Use sufficient natural or mechanical venturain airborne dust concentration below TLV	sk designed for nuisance type dusts should be used
OTHER PROTECTIVE EQUIPMENT Work long sleeved le	when installing material overhead,
Wear long-sleeved, loc	ose fitting clothing and head covering

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Keep material dry and minimize the generation of dust. Wash work clothes separately from other clothing to prevent glass fiber migration. Rinse washer

OTHER PRECAUTIONS During initial heat-up to temperatures above 350°F, an acrid odor and smoke may be given off. Adequate ventilation should be provided to protect against harmful fumes. In confined spaces, occupants should wear self-contained breathing apparatus during this period

PAGE (2) Preparation date 10/10/85

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While the information and recommendations set forth herein are believed to be accurate as of the date hereof. THE MANUFACTURER MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.





U.S. DEPARTMENT OF LABOR Occupational Safety and Health Administration

Form Approved OMB No. 44-R1387

Required under USDL Safety and Health Regulations for Ship Repairing

			earth Regulations for Ship Repairing, ig (29 CFR 1915, 1916, 1917)	•		
		SECT	ION I			
MANUFACTURER'S NAME KNAUF FIBER GLASS GmbH EMERGENCY TELEPHOR (317) 398-4434						
	beth		Shelbyville, IN 46176			
Fibrous Glass Insulation Pipe;	MOU		FORMULA Fibrous Glass			
SECTION	J II -	HAZAF	RDOUS INGREDIENTS		 -	
PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	\ \ \ \ \ \	TLV	
PIGMENTS			BASE METAL	+-	(Units)	
CATALYST			ALLOYS			
VEHICLE			METALLIC COATINGS			
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX	 		
ADDITIVES			OTHERS			
OTHERS		-				
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES						
Material · CAS Number						
Fibrous glass 65997-17-3				90	5 mg/m³	
Phenolic Resin	25104-55-6	10	respirab dust			
SEC	CTIO	N III - F	PHYSICAL DATA			
BOILING POINT (PF.)						
VAPOR PRESSURE (mm Hg.) NA			PERCENT, VOLATILE BY VOLUME (%)		NA NA	
VAPOR DENSITY (AIR*1)						
SOLUBILITY IN WATER	100				171	
APPEARANCE AND ODOR fibrous glas			with foil/skrim/paper cover	1	· · · · · · · · · · · · · · · · · · ·	
SECTION IV -	FIR	E AND 8	EXPLOSION HAZARD DATA	 -		
FLASH POINT (Method used) Fibrous glass is nonflammable. Binder resin will pyrolize in a major conflagration						
EXTINGUISHING MEDIA ω_2 , water, dr	y che	mical				
special fire fighting procedures Resil	n wil	l pyroliz	e causing dense, acrid smoke. Use self-	conta	ined	
UNUSUAL FIRE AND EXPLOSION HAZARDS					·	
	Non	e		<u> </u>		
•						

SECTION V - HEALTH HAZARD DATA

5 mg/m³ respirable dust

EFFECTS OF OVEREXPOSURE Direct eye contact will cause mechanical irritation. Skin contact may cause transitory mechanical dermatitus. Skin absoprtion does not occur. Current studies indicate that glass fibers and dust do not represent a hazard to health. This product is not considered a carcinogen.

EMERGENCY AND FIRST AID PROCEDURES Eye contact--flush eye with flowing water for at least 15 minutes Skin contact--frequent rinsing of skin surface with water to remove accumulated fibers will minimize irritation. If irritation persists consult a physician. Treat as a mechanical irritant. No long term chronic health effects have been identified. Pre-existing upper respiratory and lung diseases may be aggravated by dust.

		SEC	TION	VI D					
			211014	VI - 17(EACTIV	ITY DAT	A		
STABILITY	UNSTABL	E	CONDITIONS TO AVOID						
	STABLE	X					·		-
INCOMPATABILITY									
Hydrof luor HAZARDOUS DECO	ic acid wi	ll dissolw	225[0_9						
HAZARDOUS DECO	MPOSITION	PRODUCTS	Ammonia	. carbo	n dinxid	e carbon	monovide can	bon particulate	2 200
traces of hydroge produe chlorine	en cyanide or HCl ar	derived fr d halogenat	ram phro ted Anti	lysis of	resin.	Decompos	ition of faci	ng material wil)]
HAZARDOUS POLYMERIZATION		OCCUR					•		1
- GETTIMERIZATION	WIL	L NOT OCCU	R	χ					

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Macuum clean dust. Use a dust suppressant if sweeping is necessary

WASTE DISPOSAL METHOD

Fibrous glass is generally classified as a nonhazardous waste and disposal may be in land fill for noncritical materials. Local regulations should be consulted.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type) A disposable mask designed for nuisance type dusts should be used where sensitivity to air borne particles may cause irritation to nose or throat.

VENTILATION Use sufficient natural or mechanical ventilation to

maintain airborne dust concentration below TLV

See also Section IX OTHER

PROTECTIVE GLOVES Gloves are recommended

when installing material overhead.

OTHER PROTECTIVE EQUIPMENT Wear long-sleeved, loose fitting clothing and head covering

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Keep material dry and minimize the generation of dust. Wash work clothes separately from other clothing to prevent glass fiber migration. Rinse washer

OTHER PRECAUTIONS During initial heat-up to temperatures above 350°F, an acrid odor and smoke may be given off. Adequate ventilation should be provided to protect against harmful fures. In confined spaces, occupants should wear self-contained breathing apparatus during this period

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